

**SCREENING SITE INVESTIGATION  
FOR THE  
GIRARD SMELTING COMPANY  
BLEIGH AND MILNOR STREETS  
PHILADELPHIA, PENNSYLVANIA  
ECKEL SITE NUMBER 55**

Prepared for

U.S. Environmental Protection Agency Region 3  
Hazardous Property Cleanup Division  
1650 Arch Street  
Philadelphia, PA 19103

Prepared by

Tetra Tech EM Inc.  
7 Creek Parkway, Suite 700  
Boothwyn, PA 19061

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## **1.0 INTRODUCTION**

Under Remedial Action Contract (RAC) No. 68-S7-3002, Work Assignment No. 048-PAPA-03ZZ, U.S. Environmental Protection Agency (EPA) Region 3 tasked Tetra Tech, Inc. (Tt), to assist EPA Region 3 in the assessment of properties suspected to have been former lead smelter foundries. Tt subcontracted completion of this work assignment to Tetra Tech EM Inc. (Tetra Tech).

Former lead smelter sites nationwide were identified in an April 2001 article published in the American Journal of Public Health by Eckel, and others (Eckel study) (Reference [Ref.] 1). The majority of these lead smelters operated prior to 1964 and closed before the current environmental regulations were instituted. As part of the Eckel study, soil samples were collected from several of the identified former lead smelter properties. Results from the analysis of these soil samples indicated that concentrations of lead exceeded EPA's recommended screening level for lead in residential soils. The results of the Eckel study indicate that the air disposition of lead into soils from the former smelter operations may present an ongoing public health concern due to exposure of residential populations, especially children, located in the vicinity of these former lead smelters, to soils containing elevated concentrations of lead (Refs. 1, 2, and 3).

The Eckel study identified 77 properties that may have been formerly used as lead smelters within EPA Region 3 (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia). EPA Region 3 is currently investigating these 77 properties. The objective of EPA's investigation of these properties is to (1) determine the potential for lead-contaminated soil to be present at the former lead smelter site or nearby properties (2) identify any populations that may be at risk to exposure to this soil, and (3) determine if soil sampling is warranted at any of these sites or nearby properties.

The following activities were completed as part of the initial screening investigation of each of these former lead smelter sites: (1) verify the former lead smelter address listed in the Eckel study through historical Sanborn fire insurance maps, tax parcel information, and/or contacting local agencies, (2) determine if the site is listed in EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, (3) determine through census information and existing maps the number of schools, daycare centers or recreational parks that exist near the former lead smelter site, (4) determine the population residing within a 4-mile radius of the site, (5) conduct a windshield reconnaissance of the site and surrounding area to document the current land use, identify any exposed soil and verify the existence of any schools, daycare centers or parks in the immediate area, and (6) review all information acquired to determine if the collection and analysis of soil samples is warranted at the site or at any nearby property.

This report summarizes the findings of the tasks outlined above for the former lead smelter known as the Girard Smelting site located at the terminus of Milnor Street at Bleigh Street in Philadelphia, Pennsylvania, 19136. Each former smelter property was given a number in Eckel's study. The Eckel study number for this site is 55 (Ref. 1).

## **2.0 SITE LOCATION**

The former Girard Smelting facility was located at the terminus of Milnor Street at Bleigh Street in Philadelphia, Pennsylvania, 19136. The geographic coordinates of the former Girard Smelting facility are 40.024800° north latitude and 75.028100° west longitude on the Frankford, Pennsylvania Quadrangle, 7.5 minute series, United States Geological Survey topographic map (see Appendix A, Figure 1). The site is not currently listed in EPA's CERCLIS database (Ref. 4). An aerial photograph of the vicinity of the former lead smelter site has been included in Appendix A, Figure 2. This aerial photograph reveals the exposed soils and any identified areas of potential concern such as schools, daycare centers, or parks located within a half-mile radius of the site.

### **3.0 SITE OBSERVATIONS**

On October 13, 2005, Tetra Tech completed a non-sampling windshield reconnaissance of the Girard Smelting site and surrounding area. A photographic record of the current site conditions is included in Appendix B. Figure 3, shows the current layout of the site and surrounding area as observed during Tetra Tech's site reconnaissance. The following observations were recorded:

- The exact location of the former lead smelter could not be identified. Capital Auto Auction, consisting of a large warehouse building and parking lot, is currently located at the terminus of Milnor Street at Bleigh Street in a predominantly industrial and commercial area of Philadelphia, Pennsylvania.
- Surrounding the assumed former location of the lead smelter is Interstate 95 to the north beyond which are industrial and commercial buildings, a vacant lot and industrial buildings to the south, a large vacant area to the east, industrial/commercial buildings to the west, and a large unpaved junkyard to the southwest.
- Exposed soils exist in the immediate vicinity of the subject on vacant lots and surrounding industrial properties.
- The Delaware River is located approximately one-third of a mile south of the subject property.
- No schools, daycare centers, or residences are located within the immediate vicinity of the subject property.

### **4.0 POTENTIAL TARGETS**

Potential targets identified that may be exposed to lead-contaminated soils remaining in the vicinity of the former Girard Smelting site include the children residing at the St. Vincent's

Home for Children, which is located approximately 1,000 feet southwest of the assumed site located, and any workers that may be employed at or in the nearby vicinity of the site. The residential population within a 4-mile radius of the site is summarized in the table below (Ref. 5).

**Population Within a Four-mile Radius of the Site**

<b>Distance Ring (miles)</b>	<b>Population (number of persons)</b>
0.0 to 0.25	17
0.25 to 0.5	2,012
0.5 to 1.0	19,928
1.0 to 2.0	70,991
2.0 to 3.0	110,072
3.0 to 4.0	126,018

Source: U.S. Department of Commerce. Landview V Environmental Mapping Software based on the Bureau of Census 2000 Population Data. December 6, 2005

No schools, daycare centers, parks, or recreational areas have been identified in the area directly surrounding the site. No schools or daycare centers are located within one-half mile of the former lead smelter. St. Vincent's Home for Children is located approximately 1,000 feet southwest of the site. Russo Park, which contains several ball fields, is located approximately one-half mile northwest of the site. A portion of Disston Park and Tacony Park are located approximately one-half mile west and southwest of the site, respectively.

## **5.0 FINDINGS AND RECOMMENDATIONS**

The site is located in an area of Philadelphia characterized predominately by industrial development. Exposed soils were observed in the vicinity of the assumed former location of the lead smelter. St. Vincent's Home for Children is located approximately 1,000 feet southwest of the site. Therefore, to determine if there is a threat to the children residing at the children's home from elevated levels of lead in soils, it is recommended that soil samples be collected.

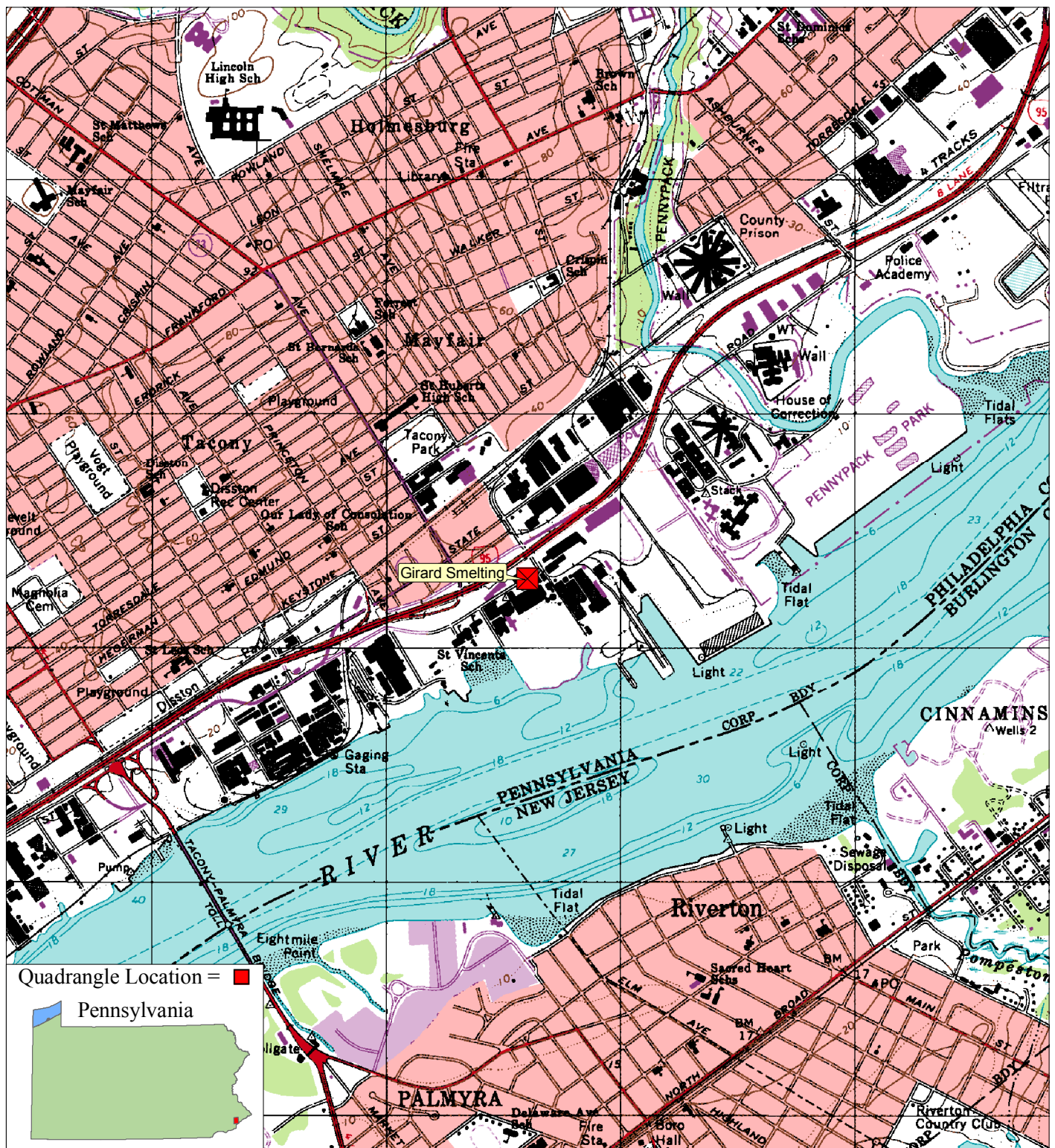
## REFERENCES

1. Eckel, W.P., Rabinowitz, M.B., Foster, G.D. American Journal of Public Health. "Discovering Unrecognized Lead-Smelting Sites by Historical Methods". April 2001.
2. Pennsylvania Department of Health. Suspected Former Lead Smelter Sites: A Potential Risk Factor for Childhood Lead Poisoning. August 2004.
3. U.S. Environmental Protection Agency (EPA). Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12. July 14, 1994.
4. U.S. EPA. Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) database. On-Line Address: <http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>
5. U.S. Census Bureau. State and County Quick Facts. Accessed On-Line on December 6, 2005. On-Line Address: [quickfacts.census.gov/qfd/states/42.html](http://quickfacts.census.gov/qfd/states/42.html).

## **APPENDIX A**

### **Figures**





0 0.25 0.5  
Miles  
Scale in Miles

Girard Smelting  
Milnor Street and Bleigh Street  
Philadelphia, Pennsylvania  
Eckel Site No. 55

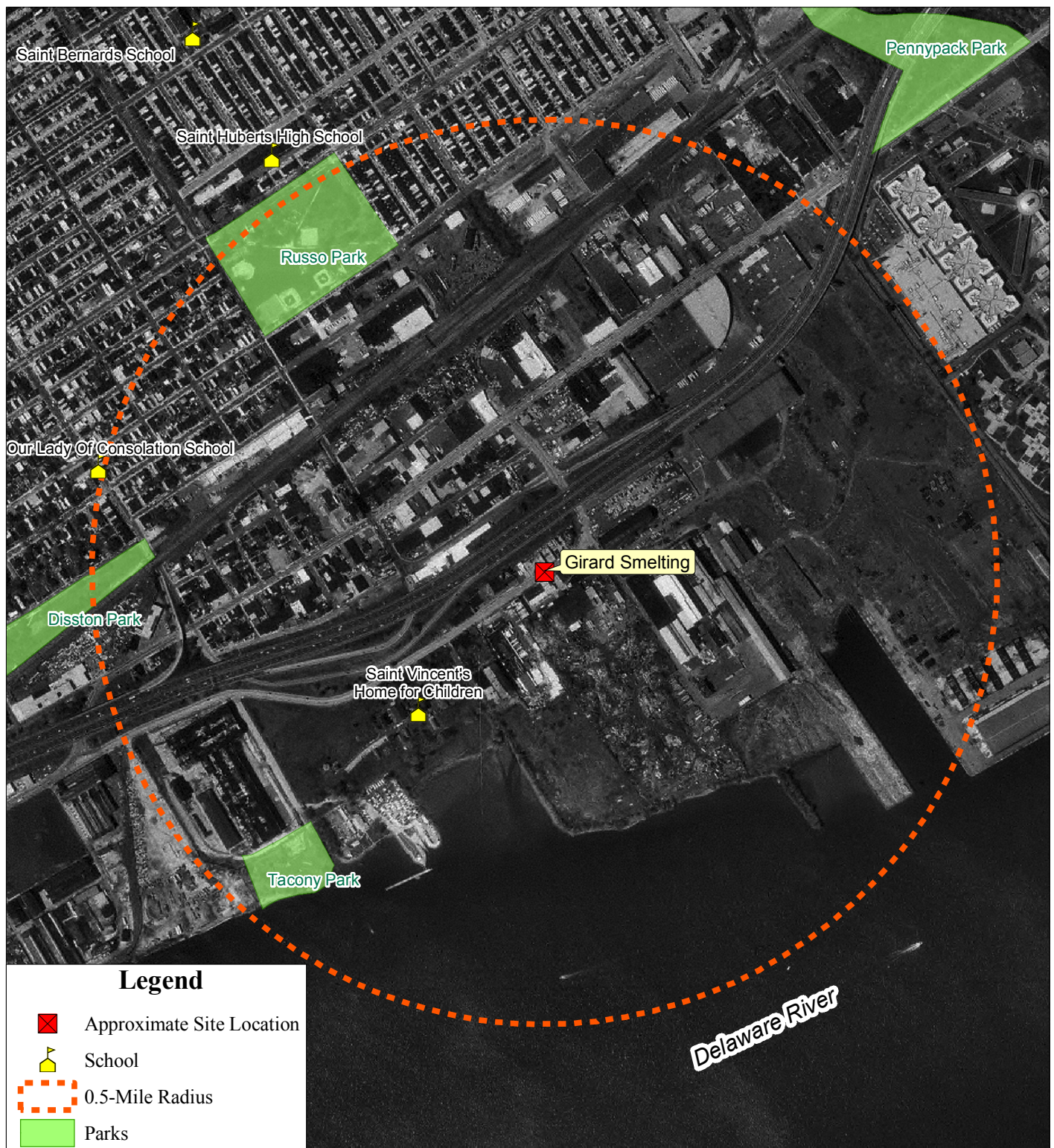


**Figure 1**  
Site Location Map

Source: Modified from USGS 7.5-Minute Series Topographic Quadrangle,  
Frankford, Pennsylvania - New Jersey, 1997







0 500 1,000  
 Feet  
 Scale in Feet

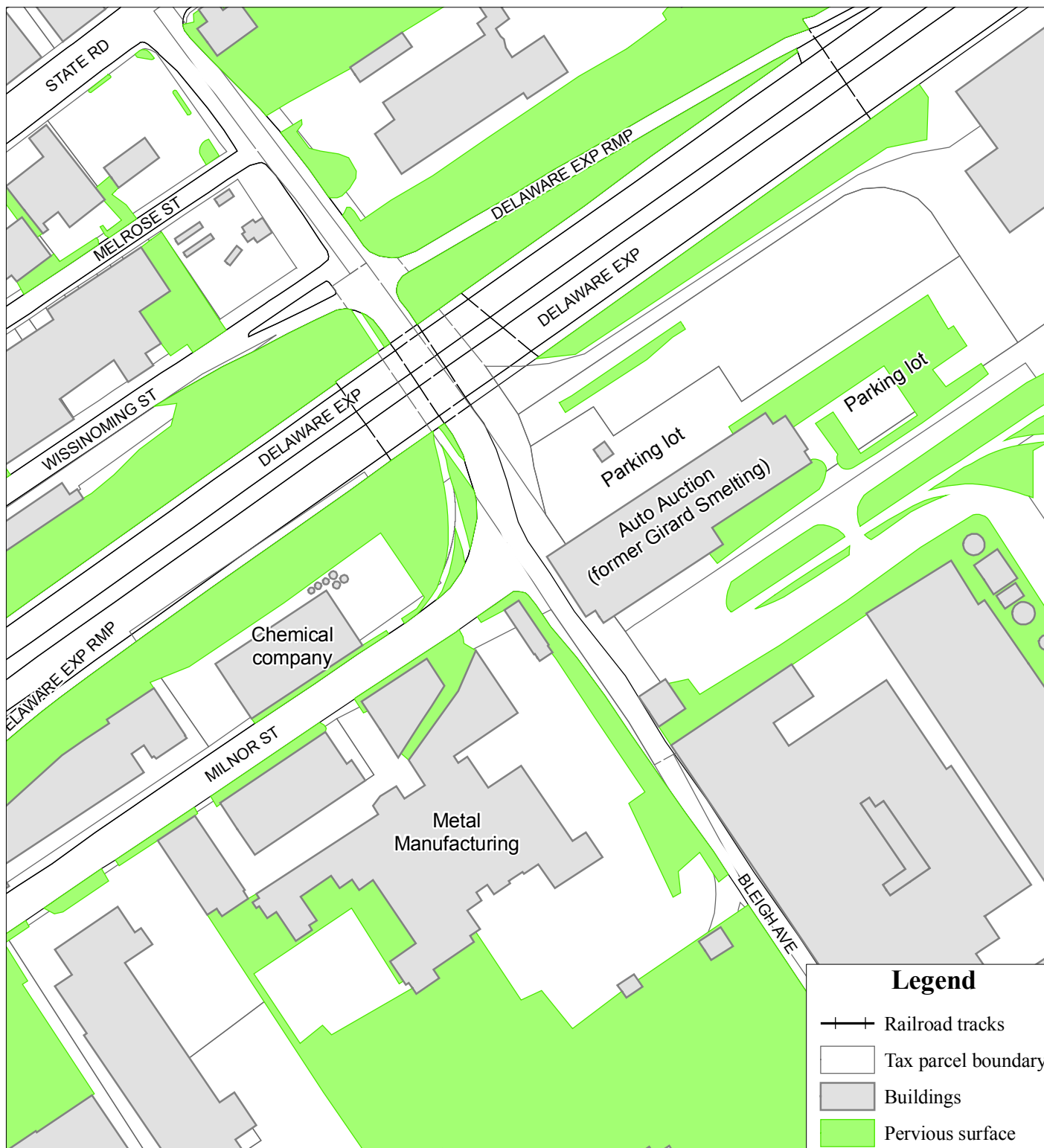
Girard Smelting  
 Milnor Street and Bleigh Street  
 Philadelphia, Pennsylvania  
 Eckel Site No. 55







**Figure 2**  
 Aerial Photograph


Source: Modified from Digital Orthophoto (DOQQ) MrSID mosaic for Frankford Quadrangle (NAPP III, 1997-2001)



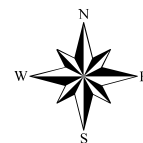


**Legend**

-  Railroad tracks
-  Tax parcel boundary
-  Buildings
-  Pervious surface

0 100 200  
 Feet  
 Scale in Feet

**Girard Smelting**  
 Milnor Street and Bleigh Street  
 Philadelphia, Pennsylvania  
 Eckel Site No. 55



**Figure 3**  
 Site Layout Map

Source: Modified from Philadelphia City Planning Commission (PCPC) Department - GIS Division, 2006.



## **APPENDIX B**

### **Photographic Documentation**





## *Photographic Documentation*

**Site Name:** Girard Smelting – Eckel Number 55

**Location:** Milnor Street and Bleigh Street, Philadelphia, Pennsylvania

**Prepared by:** Tetra Tech EM Inc.

**Photographer:** [REDACTED]

### **Photograph No. 1**

**Photograph Date:**

October 13, 2005

**Description:** View of former lead smelter, now occupied by Capital Auto Auction.



### **Photograph No. 2**

**Photograph Date:**

October 13, 2005

**Description:** View of former lead smelter at terminus of Milnor Street at Bleigh Street currently occupied by Capital Auto Auction.





## *Photographic Documentation*

**Site Name:** Girard Smelting – Eckel Number 55  
**Location:** Milnor Street and Bleigh Street, Philadelphia, Pennsylvania

**Prepared by:** Tetra Tech EM Inc.  
**Photographer:** [REDACTED]

### **Photograph No. 3**

**Photograph Date:**  
October 13, 2005

**Description:** View of Milnor Street southwest of the former lead smelter.



### **Photograph No. 4**

**Photograph Date:**  
October 13, 2005

**Description:** View of northwest corner of Milnor Street and Bleigh Street.





## *Photographic Documentation*

**Site Name:** Girard Smelting – Eckel Number 55

**Location:** Milnor Street and Bleigh Street, Philadelphia, Pennsylvania

**Prepared by:** Tetra Tech EM Inc.

**Photographer:** [REDACTED]

### **Photograph No. 5**

**Photograph Date:**  
October 13, 2005

**Description:** From the intersection of Milnor Street and Bleigh Street facing southeast down Bleigh Street towards the Delaware River.



### **Photograph No. 6**

**Photograph Date:**  
October 13, 2005

**Description:** Looking northwest on Bleigh Street from former lead smelter of Interstate 95.

